



CLEAN COPY OF PENDING CLAIMS

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1. (Once Amended) A method for typing a sample of a prion or spongiform encephalopathy disease the method comprising comparing and identifying similar physicochemical properties of the sample with a standard sample of known PrP^{Sc} type, wherein the physicochemical properties are the sizes and ratios of distinct PrP^{Sc} glycoforms.
 2. A method as claimed in claim 1 wherein the standard sample of known PrP^{Sc} type is bovine spongiform encephalopathy or Creutzfeldt-Jakob disease.
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 3. (Once Amended) A method as claimed in claim 1 wherein the comparison of physicochemical properties comprises a comparison of protease resistance, fragment size, and ratio of PrP^{Sc} glycoforms.
 4. (Once Amended) A method as claimed in claim 3 wherein the protease resistance is proteinase K resistance.
 5. (Twice Amended) A method as claimed in claim 3 wherein the spongiform encephalopathy is mammalian or chicken derived.
 6. (Twice Amended) A method as claimed in claim 3 wherein the method comprises the steps of subjecting the sample to digestion by a protease, electrophoresing the result of the digestion step and comparing the resulting pattern of fragment size and ratio of PrP^{Sc} glycoforms of the electrophoresis with a standard electrophoresis pattern of a known PrP^{Sc} type.
 7. (Once Amended) A method as claimed in claim 3 wherein the typing of the sample comprises a method of diagnosing a disease.

8. (Twice Amended) A method as claimed in claim 6 wherein the sample to be typed is mammalian or chicken derived.

B2 9. (Twice Amended) A method as claimed in claim 3 wherein the sample to be typed is derived from brain tissue, other central nervous system tissue, a tissue of the lymphoreticular system, cerebrospinal fluid and/or the blood.

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10. (Once Amended) A method as claimed in claim 6 wherein the electrophoresis pattern of the known sample has a pattern substantially similar to that of type 4 as shown in figure 4.

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13. A method of identifying infection in an animal and/or tissue of bovine spongiform encephalopathy the method comprising isolating a prion protein from the animal and/or tissue and identifying that said prion protein can be characterized by having three distinct bands on an electrophoresis gel following proteinase K digestion, the bands comprising i) a band of highest molecular weight in the greatest proportion, ii) a band of lowest molecular weight in the lowest proportion, and (iii) a band with a molecular weight between i and ii and a proportion between i and ii or characterized by having substantially similar glycoform proportions as bovine spongiform encephalopathy.

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14. A method as claimed in claim 13 wherein the animal or tissue is non-bovine.

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15. A method as claimed in claim 13 wherein the animal, and/or tissue, from which the prion is sampled is mammalian or chicken derived.

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16. A method as claimed in claim 13 wherein the prion is derived from brain tissue, other central nervous system tissue, a tissue of the lymphoreticular system, cerebrospinal fluid and/or the blood.

~~15~~²⁶. A method for identifying infection in an animal and/or tissue, as claimed in claim 13, wherein the electrophoresis pattern of the known sample has a pattern substantially similar to that of type 4 as shown in Figure 4.

27. CANCELLED

~~16~~²⁸. (New) The method of claim 5, wherein the spongiform encephalopathy is derived of mammalian origin selected from the group consisting of bovine, feline, cervine, ovine, human, primate, and murine.

~~17~~²⁹. (New) The method of claim 8, wherein the spongiform encephalopathy is derived of mammalian origin selected from the group consisting of bovine, feline, cervine, ovine, human, primate, and murine.

~~18~~³⁰. (New) The method of claim ~~15~~¹³, wherein the spongiform encephalopathy is derived of mammalian origin selected from the group consisting of bovine, feline, cervine, ovine, human, primate, and murine.

~~19~~³¹. (New) The method of claim ~~9~~, wherein the prion is derived from a tissue of the lymphoreticular system selected from the group consisting of spleen, tonsil, or lymph node.

~~20~~³². (New) The method of claim ~~16~~¹⁴, wherein the prion is derived from a tissue of the lymphoreticular system selected from the group consisting of spleen, tonsil, or lymph node.